



# COMMONWEALTH of VIRGINIA

Molly Joseph Ward  
Secretary of Natural Resources

## DEPARTMENT OF ENVIRONMENTAL QUALITY

### Blue Ridge Regional Office

[www.deq.virginia.gov](http://www.deq.virginia.gov)

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### Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: ArborTech Forest Products, Inc.  
Facility Name: ArborTech Forest Products, Inc.  
Facility Location: 500 Dearing Ave, Blackstone, VA  
Nottoway County, VA  
Registration Number: 31039  
Permit Number: BRRO31039

This permit includes the following programs:

### Federally Enforceable Requirements - Clean Air Act (Pages 3 through 21)

December 7, 2016  
Effective Date

December 6, 2021  
Expiration Date

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Regional Director  
December 7, 2016  
Signature Date

Table of Contents, 1 page  
Permit Conditions, 21 pages  
Appendix A – Calculation Procedures

Table of Contents

<b>FACILITY INFORMATION .....</b>	<b>1</b>
<b>EMISSION UNITS .....</b>	<b>2</b>
<b>FUEL BURNING EQUIPMENT REQUIREMENTS – TWO 28.7 MMBTU/HR WOOD- FIRED BOILERS (B1, B2) AND A 9.9 MMBTU/HR DISTILLATE FIRED BOILER (B3).....</b>	<b>3</b>
LIMITATIONS.....	3
MONITORING .....	5
RECORDKEEPING.....	6
<b>PROCESS EQUIPMENT REQUIREMENTS – KILNS (K1, K2, K3) AND PLANER SYSTEM (P1) .....</b>	<b>8</b>
LIMITATIONS.....	8
MONITORING .....	9
RECORDKEEPING.....	10
<b>FACILITY WIDE CONDITIONS.....</b>	<b>11</b>
LIMITATIONS.....	11
TESTING .....	12
<b>INSIGNIFICANT EMISSION UNITS .....</b>	<b>12</b>
<b>PERMIT SHIELD &amp; INAPPLICABLE REQUIREMENTS.....</b>	<b>12</b>
<b>GENERAL CONDITIONS .....</b>	<b>13</b>

## **Facility Information**

### Permittee

ArborTech Forest Products, Inc.  
500 Dearing Ave.  
Blackstone, VA 23824

### Responsible Official

John Talley  
President

### Facility

ArborTech Forest Products, Inc.  
500 Dearing Ave.  
Blackstone, VA 23824

### Contact Person

John Talley  
President  
(434) 298-0940

**County-Plant Identification Number:** 51-135-00037

**Facility Description:** NAICS Code 321113 (SIC Code 2421) – A dimensional lumber manufacturing facility (pine lumber) and by-products (i.e., bark, chips, sawdust, and shavings).

### Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment</b>							
B1	B1-1	Hurst Boiler Wood fired boiler Model m-4000-WWF	28.7 MMBtu/hr	Hurst Boiler multicyclone	B1A	PM	October 4, 2007
B2	B2-1	Hurst Boiler Wood fired boiler Model m-4000-WWF	28.7 MMBtu/hr	Hurst Boiler multicyclone	B2A	PM	October 4, 2007
B3	B3-1	Hurst distillate oil fired-boiler	9.9 MMBtu/hr	None	---	---	---
<b>Process Equipment</b>							
K1	K1 – 1 thru 10*	Wellons 54 foot dual track dry kiln	4.37 MBf/hr	---	---	---	October 4, 2007
K2	K2 – 1 thru 10*	Wellons 54 foot dual track dry kiln	4.37 MBf/hr	---	---	---	October 4, 2007
K3	K3 – 1 thru 10*	Wellons 86 foot dual track dry kiln	10.95 MBf/hr	---	---	---	October 4, 2007
P1	P1-1	Howell Metal planer system	50 MBf/hr	Howell Metal cyclone	P1A	PM	October 4, 2007

\*Each kiln has 10 vents. Alternately, five act as vents and five act as intakes.

\*\*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

## **Fuel Burning Equipment Requirements – Two 28.7 MMBtu/hr wood-fired boilers (B1, B2) and a 9.9 MMBtu/hr distillate fired boiler (B3)**

### **Limitations**

1. **Fuel Burning Equipment Requirements - (B1, B2) - Limitations** - Particulate emissions from each 28.7 MMBtu/hr wood fired boiler (B1, B2) shall be controlled by a multicyclone. Each multicyclone (B1A, B2A) shall be provided with adequate access for inspection and shall be in operation when the wood fired boiler is operating.  
(9 VAC 5-80-110 and Condition 2 of the October 4, 2007 Permit)
2. **Fuel Burning Equipment Requirements - (B1, B2) - Limitations** - Each boiler exhaust stack (B1-1, B2-2) shall be a minimum of 62.75 feet above ground elevation with an unobstructed vertical discharge, in order to comply with ambient air quality standards for particulate matter (PM-10).  
(9 VAC 5-80-110 and Condition 4 of the October 4, 2007 Permit)
3. **Fuel Burning Equipment Requirements - (B1, B2) - Limitations** - The approved fuel for the 28.7 MMBtu/hr wood fired boilers (B1, B2) is wood, excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 7 of the October 4, 2007 Permit)
4. **Fuel Burning Equipment Requirements - (B3) – Limitations** - The approved fuel for the 9.9 MMBtu/hr boiler (B3) is distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, “Standard Specification for Fuel Oils.” A change in the fuels may require a permit to modify and operate.  
(9 VAC 5-80-110)
5. **Fuel Burning Equipment Requirements - (B1, B2) - Limitations** - Emissions from the operation of the 28.7 MMBtu/hr wood fired boilers (B1, B2) shall not exceed the limits specified below:

	<u>Each Boiler</u>	<u>Both Boilers Combined</u>
Particulate Matter	0.3 lbs/MMBtu	75.4 tons/yr
PM-10 (filterable +condensable)	0.3 lbs/MMBtu	75.4 tons/yr
Sulfur Dioxide	0.5 lbs/hr	4.5 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	6.3 lbs/hr	55.2 tons/yr
Volatile Organic Compounds	0.7 lbs/hr	6.8 tons/yr

Carbon Monoxide                      0.5    lbs/MMBtu                      125.7    tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these annual emission limits may be determined as stated in Conditions 3 and 15.

(9 VAC 5-80-110 and Condition 9 of the October 4, 2007 Permit)

6. **Fuel Burning Equipment Requirements - (B3) – Limitations** – Emissions from the operation of the 9.9 MMBtu/hr boiler (B3) shall not exceed the limits specified below:

Particulate Matter                      0.6    lb/MMBtu

Sulfur Dioxide                      26.14    lb/hr

(9 VAC 5-80-110, 9 VAC 5-50-10 D, 9 VAC 5-40-900, and 9 VAC 5-40-930)

7. **Fuel Burning Equipment Requirements - (B1, B2, B3) – Limitations** – The 28.7 MMBtu/hr wood fired boilers (B1, B2) and the 9.9 MMBtu/hr boiler (B3) must conduct a performance tune-up biennially in accordance with 40 CFR 63.11223(b). Each biennial performance tune-up must be conducted no more than 25 months after the previous performance tune-up.  
(9 VAC 5-80-110 and 40 CFR 63.11223(a))
8. **Fuel Burning Equipment Requirements - (B1, B2, B3) – Limitations** – At all times the 28.7 MMBtu/hr wood fired boilers (B1, B2) and the 9.9 MMBtu/hr boiler (B3), including associated air pollution control equipment and monitoring equipment, must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Virginia DEQ that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.  
(9 VAC 5-80-110 and 40 CFR 63.11205(a))
9. **Fuel Burning Equipment Requirements - (B1, B2, B3) – Limitations** – Upon a switch in fuel or physical change to the 28.7 MMBtu/hr wood fired boilers (B1, B2) or the 9.9 MMBtu/hr boiler (B3) that results in the applicability of a different subcategory within 40 CFR 63 Subpart JJJJJJ, or a boiler becoming subject to 40 CFR 63 Subpart JJJJJJ, compliance shall be demonstrated within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted within 30 days of the change and in accordance with Condition 16.  
(9 VAC 5-80-110 and 40 CFR 63.11210(h))
10. **Fuel Burning Equipment Requirements - (B1, B2) - Limitations** – Visible emissions from the 28.7 MMBtu/hr wood fired boilers (B1, B2) exhaust shall not exceed 20% opacity

except during one six-minute period in any one hour in which visible emissions shall not exceed 27% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-80-110 and Condition 12 of the October 4, 2007 Permit)

11. **Fuel Burning Equipment Requirements - (B3) - Limitations** – Visible emissions from the 9.9 MMBtu/hr boiler (B3) exhaust shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-80-110 and 9 VAC 5-50-80)

### Monitoring

12. **Fuel Burning Equipment Requirements - (B1, B2) - Monitoring** - An annual internal inspection shall be conducted on each multicyclone (B1A, B2A) by the permittee to ensure structural integrity. (9 VAC 5-80-110 E)
13. **Fuel Burning Equipment Requirements - (B1, B2) – Monitoring** – Daily observations for the presence of visible emissions from each 28.7 MMBtu/hr wood fired boiler (B1, B2) stack (B1-1, B2-1) shall be made. The presence of visible emissions shall require the permittee to:
- a. take timely corrective action such that the 28.7 MMBtu/hr wood fired boiler(s) (B1, B2) resume(s) operation with no visible emissions, or,
  - b. conduct a visible emission evaluation (VEE) on the 28.7 MMBtu/hr wood fired boiler stack(s) (B1-1, B2-1) with visible emissions in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the boiler(s) are 20% opacity or less. If any of the observations exceed 20% opacity, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the boiler(s) resume(s) operation within the 20% opacity limit.

The permittee shall maintain an observation log for each boiler (B1, B2) to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If a wood fired boiler (B1, B2) has not been operated for an entire day, it shall be noted in the log book.

(9 VAC 5-80-110 E and 9 VAC 5-80-110 K)

14. **Fuel Burning Equipment Requirements - (B3) – Monitoring** – Daily observations of the presence of visible emissions from the exhaust vent of 9.9 MMBtu/hr boiler (B3) shall be made. The presence of visible emissions shall require the permittee to:

- c. take timely corrective action such that the 9.9 MMBtu/hr boiler (B3) resumes operation with no visible emissions, or,
- d. conduct a visible emission evaluation (VEE) on the 9.9 MMBtu/hr boiler stack (B3-1) with visible emissions in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the boiler are 20% opacity or less. If any of the observations exceed 20% opacity, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the boiler resumes operation within the 20% opacity limit.

The permittee shall maintain an observation log for the 9.9 MMBtu/hr boiler (B3) to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If the 9.9 MMBtu/hr boiler (B3) has not been operated for an entire day, it shall be noted in the log book.  
(9 VAC 5-80-110 E and 9 VAC 5-80-110 K)

### **Recordkeeping and Notifications**

15. **Fuel Burning Equipment Requirements - (B1, B2, B3) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. Monthly and annual throughput of wood combusted in each 28.7 MMBtu/hr wood fired boiler (B1, B2). [40 CFR 60.48(c)(g)]
- b. Fuel supplier records sufficient to demonstrate that fuel oil received for combustion in the 9.9 MMBtu/hr complies with the American Society of Testing and Materials specifications for Grade 1 or 2 fuel oil.
- c. Records of boiler operator training, operating procedures, and maintenance schedules as required by Condition 28.
- d. Monthly and annual emissions calculations for particulate matter, PM-10, sulfur dioxide, nitrogen oxides, carbon monoxide, and volatile organic compounds from each wood fired boiler (B1, B2) using calculation methods contained in Appendix A of this permit to verify compliance with the emission limitations in Condition 5. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

- e. Records of the annual inspection conducted on each multicyclone (B1A, B2A) and resultant corrective actions taken.
- f. Visible emission logs for each wood fired boiler (B1, B2), as required by Condition 13.
- g. Visible emission logs for the 9.9 MMBtu/hr boiler (B3), as required by Condition 14.
- h. Records of each notification and report submitted to comply with 40 CFR 63 Subpart JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status previously submitted. [40 CFR 63.11225(c)(1)]
- i. Records of each boiler (B1, B2, B3) initial performance tune-up and each biennial performance tune-up that include the date of the tune-up, the procedures followed for the tune-up, and the manufacturer's specifications to which the boiler was tuned. [40 CFR 63.11225(c)(2)]
- j. Copies of the energy assessment report for each boiler (B1, B2, B3) required by 40 CFR 63.11196(a)(3). [40 CFR 63.11225(c)(2)(iii)]
- k. Records of the occurrence and duration of each malfunction of the boilers (B1, B2, B3), or of the associated air pollution control and monitoring equipment. [40 CFR 63.11225(c)(4)]
- l. Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 8, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11225(c)(5)]

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years. Additionally, the 40 CFR 63 Subpart JJJJJ records (Conditions 15.h - l shall be in a form suitable and readily available for expeditious review, and must be instantly accessible at the site for at least 2 years after the date of each recorded action. The 40 CFR 63 Subpart JJJJJ records may be kept off site for the remaining 3 years. (9 VAC 5-80-110, 40 CFR 60.48c(g), 40 CFR 63.11225(c), 40 CFR 63.11225(d), and Condition 15 of the October 4, 2007 Permit)

**16. Fuel Burning Equipment Requirements - (B1, B2, B3) - Notifications**— Notifications required by Condition 9 shall include the following:

- a. The name of the owner or operator of the affected source;
- b. The location of the source;
- c. The boiler(s) that have switched fuels or were physically changed;

- d. The date of the notice; and
- e. The date upon which the fuel switch or physical change occurred.

(9 VAC 5-80-110 and 40 CFR 63.11225(g))

## Reporting

17. **Fuel Burning Equipment Requirements - (B1, B2, B3) – Reporting** – A biennial compliance report shall be prepared by March 1 for the previous two calendar years. Upon request by the DEQ, the biennial compliance report shall be submitted to the DEQ. The biennial compliance report shall include the information specified in 63.11225(b)(1) through (2).  
(9 VAC 5-80-110 and 63.11225(b))

## Process Equipment Requirements – Kilns (K1, K2, K3) and Planer System (P1)

### Limitations

18. **Process Equipment Requirements - (K1, K2, K3, P1) - Limitations** - The throughput of wood through the dry kilns (K1, K2, K3) and planer system (P1) shall not exceed 95,500 thousand board feet (MBf) per year, calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110 and Condition 6 of the October 4, 2007 Permit)
19. **Process Equipment Requirements - (P1) - Limitations** – Particulate emissions from the planer system (P1) shall be controlled by a cyclone. The cyclone (P1A) shall be provided with adequate access for inspection and shall be in operation when the planer system is operating.  
(9 VAC 5-80-110 and Condition 3 of the October 4, 2007 Permit)
20. **Process Equipment Requirements - (K1, K2, K3) – Limitations** - Emissions from the three lumber drying kilns (K1, K2, K3) shall not exceed the limits specified below:

Volatile Organic Compounds	3.32 lb/MBf	158.5	tons/yr
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Annual emissions calculated as the sum of each consecutive 12 month period. These emissions are derived from the estimated overall emission contribution from the operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 18 and 27.

(9 VAC 5080-110 and Condition 10 of the October 4, 2007 Permit)

21. **Process Equipment Requirements - (P1) – Limitations** – Emissions from the planer system (P1) shall not exceed the limits specified below:

Particulate Matter	18.7 lbs/hr	35.8 tons/yr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 18 and 27.

(9 VAC 5-80-110 and Condition 11 of the October 4, 2007 Permit)

### Monitoring

22. **Process Equipment Requirements - (P1) – Monitoring** - An annual internal inspection shall be conducted on the cyclone (P1A) by the permittee to ensure structural integrity.  
(9 VAC 5-80-110 E)
23. **Process Equipment Requirements - (K1, K2, K3) – Monitoring** – Visible emissions from the dry kilns (K1, K2, K3) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emission shall not exceed 30% opacity.  
(9 VAC 5-80-110 and Condition 14 of the October 4, 2007 Permit)
24. **Process Equipment Requirements - (P1) – Monitoring** – Visible emissions from the planer system (P1) cyclone exhaust stack (P1-1) shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-80-110 and Condition 13 of the October 4, 2007 Permit)
25. **Process Equipment Requirements - (P1) – Monitoring** – Daily observations of the presence of visible emissions from the planer system cyclone stack (P1-1) shall be made. The presence of visible emissions shall require the permittee to:
- take timely corrective action such that the planer system cyclone stack (P1-1) resumes operation with no visible emissions, or,
  - conduct a visible emission evaluation (VEE) on the planer system cyclone stack (P1-1) in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the planer system cyclone stack are 5% opacity or less. If any of the observations exceed 5% opacity, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the planer system cyclone stack resumes operation within the 5% opacity limit.

The permittee shall maintain a visible emissions observation log for planer system cyclone stack (P1-1) to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any

necessary corrective action, and the name of the observer. If the planer system has not been operated for an entire day, it shall be noted in the log book.  
(9 VAC 5-80-110 E and 9 VAC 5-80-110 K)

**26. Process Equipment Requirements - (K1, K2, K3) – Monitoring** - Daily observations of the presence of visible emissions from each of the kilns (K1, K2, K3) shall be made. The presence of visible emissions shall require the permittee to:

- a. take timely corrective action such that each of the kilns (K1, K2, K3) resumes operation with no visible emissions, or,
- b. conduct a visible emission evaluation (VEE) on each of the kilns (K1, K2, K3) in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from each of the kilns (K1, K2, K3) are 20% opacity or less. If any of the observations exceed 20% opacity, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that each of the kilns (K1, K2, K3) resumes operation within the 20% opacity limit.

The permittee shall maintain a visible emissions observation log for each of the kilns (K1, K2, K3) to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If a kiln has not been operated for an entire day, it shall be noted in the log book.

(9 VAC 5-80-110 E and 9 VAC 5-80-110 K)

## **Recordkeeping**

**27. Process Equipment Requirements - (K1, K2, K3, P1) – Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. Monthly and annual throughput of wood through the dry kilns (K1, K2, K3) in units of thousand board feet (MBf). Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.
- b. Monthly and annual throughput of wood through the planer system (P1) in units of thousand board feet (MBf). Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.
- c. Monthly and annual emissions calculations for volatile organic compounds, and methanol from the dry kilns (K1, K2, K3) using calculation methods contained in Appendix A of this permit to verify compliance with the emissions limitations in

Condition 20. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

- d. Monthly and annual emissions calculations for particulate matter from the planer system (P1) using calculation methods contained in Appendix A of this permit to verify compliance with the emissions limitations in Condition 21. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.
- e. Visible emission logs for dry kilns (K1, K2, K3) and planer system (P1) in accordance with Conditions 25 and 26.
- f. Records of the annual inspection of the cyclone (P1A) and any resultant maintenance or corrective actions.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 15 of the October 4, 2007 Permit)

## **Facility Wide Conditions**

### **Limitations**

28. **Facility Wide Conditions - Limitations** - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
  - b. Maintain an inventory of spare parts.
  - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
  - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-110 and Condition 20 of the October 4, 2007 Permit)

## **Testing**

29. **Facility Wide Conditions - Testing** - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.  
(9 VAC 5-80-110 and Condition 16 of the October 4, 2007 Permit)

### Insignificant Emission Units

30. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80-720C)
T1	10,000 gallon above ground distillate oil tank	9 VAC 5-80-720 B	VOC	---
---	Green wood sawmill	9 VAC 5-80-720 B	PM	---

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

### Permit Shield & Inapplicable Requirements

31. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40CFR60c(a)	Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	< 10 MMBtu/hr distillate oil fired boiler (B3)
40CFR63.2231(b)	40 CFR 63 Subpart DDDD, National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products	Facility is not a major source of HAPs.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the

ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

### **General Conditions**

32. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.  
(9 VAC 5-80-110 N)
33. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
34. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
35. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
36. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
37. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

38. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
39. **General Conditions -Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- a. The date, place as defined in the permit, and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.
- (9 VAC 5-80-110 F)
40. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.  
(9 VAC 5-80-110 F)
41. **General Conditions -Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
  - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
    - i. Exceedance of emissions limitations or operational restrictions;

- ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
  - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

42. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3\_APD\_Permits@epa.gov

(9 VAC 5-80-110 K.5)

43. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, Blue Ridge Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 41 of this permit.  
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)
44. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the board of such failure or malfunction and shall within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown and the demonstrations in subsection G of this section. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this subsection for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the facility or control equipment is again in operation, the owner shall notify the board.  
(9 VAC 5-20-180 C)
45. **General Conditions - Failure/Malfunction Reporting** - The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the 14 day written notification.  
(9 VAC 5-20-180 C)
46. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.  
(9 VAC 5-80-110 G.1)
47. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.  
(9 VAC 5-80-110 G.2)

48. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.  
(9 VAC 5-80-110 G.3)
49. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.  
(9 VAC 5-80-190 and 9 VAC 5-80-260)
50. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.  
(9 VAC 5-80-110 G.5)
51. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.  
(9 VAC 5-80-110 G.6)
52. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.  
(9 VAC 5-80-110 K.1)
53. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.  
(9 VAC 5-80-110 H, 9 VAC 5-80-340 C and 9 VAC 5-80-2340 B)

54. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
  - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
  - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
  - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
  - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
- (9 VAC 5-40-90, 9 VAC 5-50-90, and Condition 5 of the October 4, 2007 Permit)
55. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.  
(9 VAC 5-50-20 E)
56. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.  
(9 VAC 5-80-110 J)

57. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

58. **General Conditions - Reopening For Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

59. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

60. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.  
(9 VAC 5-80-160)
61. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)
62. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)
63. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.  
(9 VAC 5-80-190 C and 9 VAC 5-80-260)
64. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.  
(9 VAC 5-80-80 E)
65. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.  
(40 CFR Part 82, Subparts A-F)
66. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following:

Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).  
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

67. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.  
(40 CFR Part 68)
68. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.  
(9 VAC 5-80-110 I)
69. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
- a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
  - b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
  - c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

Appendix A: Calculation Procedures  
ArborTech Forest Products, Inc.

Each of the following equations (Equations 1-3) must be satisfied monthly for each consecutive 12-month period and each pollutant. In no event shall actual emission rates of any pollutant exceed those rates represented by the emission factors given above for each pollutant.

1. Emission calculations required by Condition 15.d to demonstrate compliance with the annual emission limits in Condition 5 (Boilers - B1, B2) shall be made in accordance with Equation 1:

**Equation 1:  $E1 = \text{Boiler}_{\text{thru}} \times H \times EF \times (1 \text{ ton/ } 2000 \text{ lb})$**

Where:

$E1$  = annual emission rate from boilers (B1, B2), in tons per year  
 $\text{Boiler}_{\text{thru}}$  = Boilers (B1, B2) fuel throughput for the most recent 12-month period, in tons  
 $H$  = heat content of boiler fuel (wood), in MMBtu/ton  
 $EF$  = emission factor, in lb/MMBtu

Emission factors used for Equation 1 shall be as follows:

Particulate Matter	0.3 lb/MMBtu
PM-10	0.3 lb/MMBtu
Carbon Monoxide	0.5 lb/MMBtu
Volatile Organic Compounds	0.027 lb/MMBtu
Sulfur Dioxide	0.018 lb/MMBtu
Nitrogen Oxides (as NO <sub>2</sub> )	0.22 lb/MMBtu

2. Emission calculations required by Condition 27.c to demonstrate compliance with the annual VOC emission limit in Condition 20 (Kilns - K1, K2, K3) shall be made in accordance with Equation 2:

**Equation 2:  $E2 = \text{Kiln}_{\text{thru}} \times EF \times (1 \text{ ton/ } 2000 \text{ lb})$**

Where:

$E2$  = annual emission rate from the kilns (K1, K2, K3), in tons per year  
 $\text{Kiln}_{\text{thru}}$  = the kilns (K1, K2, K3) throughput for the most recent 12-month period, in thousand board feet (MBf)  
 $EF$  = emission factor for VOC = 3.32 lb/MBf

3. Emissions Calculations required by Condition 27.d to demonstrate compliance with emission limits in Condition 21 (P1) shall be made in accordance with Equation 3:

**Equation 3:  $E3 = P1_{\text{thru}} \times EF \times (1 \text{ ton/ } 2000 \text{ lb})$**

Where:

E3 = annual emission rate from P1, in tons per year  
P1<sub>thru</sub> = P1 throughput for the most recent 12-month period, in thousand board feet (MBf)  
EF = emission factor for PM = 0.363 lb/MBf\*

\*0.35 tons/MBf x [(1% sawdust x 31% PM x 15% emitted) + (1% sawdust x 0.37% PM10 x 100% emitted) + (2% chips x 0.56% PM x 15% emitted)]